

SAP702PCT. ST25
SEQUENCE LISTING

<110> SUMITOMO CORPORATION
Irimura, Tatsuro

<120> Use of Lectin Library for glycoprotein and cell identification, serum and cell diagnosis, and glycoprotein and cell fractionization

<130> SAP-702-PCT

<150> JP2002-239979

<151> 2002-08-20

<160> 31

<170> PatentIn version 3.1

<210> 1

<211> 950

<212> DNA

<213> Maackia amurensis

<220>

<221> CDS

<222> (4).. (858)

<223>

<400> 1

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| gcc | atg | gct | act | tcc | aac | tca | aaa | cca | act | caa | gtc | ctt | ctt | gcc | acc | 48 |
| | Met | Ala | Thr | Ser | Asn | Ser | Lys | Pro | Thr | Gln | Val | Leu | Leu | Ala | Thr | |
| 1 | | | | | 5 | | | | | 10 | | | | 15 | | |
| | | | | | | | | | | | | | | | | |
| ttc | tta | act | ttc | ttc | ott | ttg | cta | ctc | aac | aac | gta | aac | tca | tca | gat | 96 |
| Phe | Leu | Thr | Phe | Phe | Leu | Leu | Leu | Leu | Asn | Asn | Val | Asn | Ser | Ser | Asp | |
| | | | | 20 | | | | | 25 | | | | | 30 | | |
| | | | | | | | | | | | | | | | | |
| gag | ctt | tct | ttt | acc | atc | aac | aat | ttc | atg | cca | aat | caa | ggc | gat | cta | 144 |
| Glu | Leu | Ser | Phe | Thr | Ile | Asn | Asn | Phe | Met | Pro | Asn | Gln | Gly | Asp | Leu | |
| | | | 35 | | | | | 40 | | | | | 45 | | | |
| | | | | | | | | | | | | | | | | |
| ctc | ttc | caa | ggg | gta | gcc | act | gtt | tca | cca | aca | ggg | gta | tta | caa | ctt | 192 |
| Leu | Phe | Gln | Gly | Val | Ala | Thr | Val | Ser | Pro | Thr | Gly | Val | Leu | Gln | Leu | |
| | | 50 | | | | | 55 | | | | | 60 | | | | |
| | | | | | | | | | | | | | | | | |
| acc | agc | gaa | gaa | aac | ggg | caa | ccc | ctg | gag | tat | tct | gtt | ggc | aga | gct | 240 |
| Thr | Ser | Glu | Glu | Asn | Gly | Gln | Pro | Leu | Glu | Tyr | Ser | Val | Gly | Arg | Ala | |
| | 65 | | | | | 70 | | | | | 75 | | | | | |
| | | | | | | | | | | | | | | | | |
| cta | tat | act | gcc | cct | gtg | cgc | att | tgg | gac | agt | acc | act | ggc | gcc | gta | 288 |
| Leu | Tyr | Thr | Ala | Pro | Val | Arg | Ile | Trp | Asp | Ser | Thr | Thr | Gly | Ala | Val | |
| 80 | | | | | 85 | | | | 90 | | | | | | 95 | |
| | | | | | | | | | | | | | | | | |
| gca | agc | ttc | tcc | act | tcc | ttc | acc | ttt | gtt | gtg | aaa | gca | gct | agg | gga | 336 |
| Ala | Ser | Phe | Ser | Thr | Ser | Phe | Thr | Phe | Val | Val | Lys | Ala | Ala | Arg | Gly | |
| | | | | 100 | | | | | 105 | | | | | 110 | | |

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| | |
|---|-----|
| gct tct gac ggt tta gcc ttc ttt ctt gca cca cct gat tot cag atc Ala Ser Asp Gly Leu Ala Phe Phe Leu Ala Pro Pro Asp Ser Gln Ile 115 120 125 | 384 |
| cct tcg ggc agc gta tcg aaa tac cta gga ctt ttt aac aac tca aat Pro Ser Gly Ser Val Ser Lys Tyr Leu Gly Leu Phe Asn Asn Ser Asn 130 135 140 | 432 |
| tcc gat agt tcc aac caa att gtt gct gta gag ttt gac act tac ttc Ser Asp Ser Ser Asn Gln Ile Val Ala Val Glu Phe Asp Thr Tyr Phe 145 150 155 | 480 |
| ggc cat agt tat gat ccc tgg gat cca aat tat cga cat atc gga att Gly His Ser Tyr Asp Pro Trp Asp Pro Asn Tyr Arg His Ile Gly Ile 160 165 170 175 | 528 |
| gat gtc aac ggt att gag tcg ata aaa act gtg caa tgg gat tgg att Asp Val Asn Gly Ile Glu Ser Ile Lys Thr Val Gln Trp Asp Trp Ile 180 185 190 | 576 |
| aac ggc gga gtt gcc ttt gct acc ata acc tat cta gct ccc aac aaa Asn Gly Gly Val Ala Phe Ala Thr Ile Thr Tyr Leu Ala Pro Asn Lys 195 200 205 | 624 |
| acg tta ata gca tct cta gtt tac cct tcc aat caa aca agt ttc att Thr Leu Ile Ala Ser Leu Val Tyr Pro Ser Asn Gln Thr Ser Phe Ile 210 215 220 | 672 |
| gtc gct gct tct gtt gat ttg aag gga atc ctc cct gag tgg gtt aga Val Ala Ala Ser Val Asp Leu Lys Gly Ile Leu Pro Glu Trp Val Arg 225 230 235 | 720 |
| gtt ggt ttc tct gct gcc acg ggt gct cct aaa gca gtt gaa acc cac Val Gly Phe Ser Ala Ala Thr Gly Ala Pro Lys Ala Val Glu Thr His 240 245 250 255 | 768 |
| gat gtt cgt tcc tgg tct ttc acg tca act ttg gaa gcc aac agc cct Asp Val Arg Ser Trp Ser Phe Thr Ser Thr Leu Glu Ala Asn Ser Pro 260 265 270 | 816 |
| gct gat gtg gat aat aat gtg cat atc gca cgt tac act gca Ala Asp Val Asp Asn Asn Val His Ile Ala Arg Tyr Thr Ala 275 280 285 | 858 |
| tgatctcgtg agctttcgta tgtattaggt gtttatgtaa attaaataaa aatgacctga | 918 |
| aataatgggtt atcggcgcag ctatacaaaa at | 950 |

<210> 2
 <211> 285
 <212> PRT
 <213> Maackia amurensis
 <400> 2

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Met Ala Thr Ser Asn Ser Lys Pro Thr Gln Val Leu Leu Ala Thr Phe
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Leu Thr Phe Phe Leu Leu Leu Leu Asn Asn Val Asn Ser Ser Asp Glu
 20 25 30

Leu Ser Phe Thr Ile Asn Asn Phe Met Pro Asn Gln Gly Asp Leu Leu
 35 40 45

Phe Gln Gly Val Ala Thr Val Ser Pro Thr Gly Val Leu Gln Leu Thr
 50 55 60

Ser Glu Glu Asn Gly Gln Pro Leu Glu Tyr Ser Val Gly Arg Ala Leu
 65 70 75 80

Tyr Thr Ala Pro Val Arg Ile Trp Asp Ser Thr Thr Gly Ala Val Ala
 85 90 95

Ser Phe Ser Thr Ser Phe Thr Phe Val Val Lys Ala Ala Arg Gly Ala
 100 105 110

Ser Asp Gly Leu Ala Phe Phe Leu Ala Pro Pro Asp Ser Gln Ile Pro
 115 120 125

Ser Gly Ser Val Ser Lys Tyr Leu Gly Leu Phe Asn Asn Ser Asn Ser
 130 135 140

Asp Ser Ser Asn Gln Ile Val Ala Val Glu Phe Asp Thr Tyr Phe Gly
 145 150 155 160

His Ser Tyr Asp Pro Trp Asp Pro Asn Tyr Arg His Ile Gly Ile Asp
 165 170 175

Val Asn Gly Ile Glu Ser Ile Lys Thr Val Gln Trp Asp Trp Ile Asn
 180 185 190

Gly Gly Val Ala Phe Ala Thr Ile Thr Tyr Leu Ala Pro Asn Lys Thr
 195 200 205

Leu Ile Ala Ser Leu Val Tyr Pro Ser Asn Gln Thr Ser Phe Ile Val
 210 215 220

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Ala Ala Ser Val Asp Leu Lys Gly Ile Leu Pro Glu Trp Val Arg Val
225 230 235 240

Gly Phe Ser Ala Ala Thr Gly Ala Pro Lys Ala Val Glu Thr His Asp
245 250 255

Val Arg Ser Trp Ser Phe Thr Ser Thr Leu Glu Ala Asn Ser Pro Ala
260 265 270

Asp Val Asp Asn Asn Val His Ile Ala Arg Tyr Thr Ala
275 280 285

<210> 3
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Tag Primer pFLAG-Spe I-sense

<400> 3
ccgggtacot gcactagtag atagatgagc to 32

<210> 4
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Tag Primer pFLAG-Spe I-anti

<400> 4
gagctcatct atctactagt gcaggtaccc gg 32

<210> 5
<211> 26
<212> DNA
<213> Artificial

<220>
<223> pFLAG-XhoI

<400> 5
ccaggtgaaa ctgctcgagt cagatg 26

<210> 6
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Primer MAH-Spe I-anti

<400> 6
tgggcaacta gttgcagtgt aacgtgcg

28

<210> 7
<211> 26
<212> DNA
<213> Artificial

<220>
<223> Analyzing Primer N-26

<400> 7
catcataacg gttctggcaa atattc

26

<210> 8
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Sequence Primer Loop D-Seq

<400> 8
gttaatagca totctagttt accc

24

<210> 9
<211> 59
<212> DNA
<213> Artificial

<220>
<223> Inert Primer LLD3

<220>
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<222> (34).. (35)
<223> n is a or c or g or t or u.

<220>
<221> misc_feature
<222> (33).. (33)
<223> m is a or c.

<400> 9
ctacaagatc taacatcgtg gggttcaact gcmnnttttag gagcaccogt ggcagcaga

59

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<210> 10
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Insert Primer LLD4

<220>
 <221> misc_feature
 <222> (37).. (38)
 <223> n is a or c or g or t or u.

<220>
 <221> misc_feature
 <222> (36).. (36)
 <223> m is a or c.

<400> 10
 ctacaagatc taacatcgtg ggtttcaact gctttmnag gagcaccgt ggcagcaga 59

<210> 11
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Insert Primer LLD5

<220>
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 <222> (40).. (41)
 <223> n is a or c or g or t or u.

<220>
 <221> misc_feature
 <222> (39).. (39)
 <223> m is a or c.

<400> 11
 ctacaagatc taacatcgtg ggtttcaact gctttaggm nagcaccgt ggcagcaga 59

<210> 12
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Insert Primer LLD6

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<220>
 <221> misc_feature
 <222> (43)..(44)
 <223> n is a or c or g or t or u.

<220>
 <221> misc_feature
 <222> (42)..(42)
 <223> m is a or c.

<400> 12
 ctacaagatc taacatcgtg ggtttcaact gctttaggag cmnnaccgt ggcagcaga 59

<210> 13
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Insert Primer MAH loop D-1 Phe

<400> 13
 ctacaagatc taacatcgtg ggtttcaaaa actgotttag gagcaccgt ggcagcaga 59

<210> 14
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Insert Primer MAH loop D-2 Asp

<400> 14
 ctacaagatc taacatcgtg ggtttcaaca tctgotttag gagcaccgt ggcagcaga 59

<210> 15
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Insert Primer MAH loop D-3 Cys

<400> 15
 ctacaagatc taacatcgtg ggtttcaact gcacatttag gagcaccgt ggcagcaga 59

<210> 16
 <211> 59
 <212> DNA
 <213> Artificial

<220>

<223> Insert Primer MAH loop D-4 Asp

<400> 16

ctacaagatc taacatcgtg ggtttcaact gctttatcag gagcaccogt ggcagcaga 59

<210> 17

<211> 59

<212> DNA

<213> Artificial

<220>

<223> Insert Primer MAH loop D-6 Phe

<400> 17

ctacaagatc taacatcgtg ggtttcaact gctttaggag caaaaccogt ggcagcaga 59

<210> 18

<211> 40

<212> DNA

<213> Artificial

<220>

<223> Primer EcoRI-S

<400> 18

ccgatagttc caaccaaatt gttgctgtag aattcgacac 40

<210> 19

<211> 21

<212> DNA

<213> Artificial

<220>

<223> BamHI reverse primer

<400> 19

cacaaacgaa tggggatcca c 21

<210> 20

<211> 26

<212> DNA

<213> Artificial

<220>

<223> N-Flag-XhoI primer

<400> 20

ccaggtgaaa ctgctogagt cagatg 26

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<210> 21
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <223> Antisense primer Flag-Sal I for PCR

<400> 21
 gtggtgact gcagtgtaac gtg

23

<210> 22
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> Clone 1

<400> 22

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Tyr | Phe | Gly | His | Gly | Tyr | Asp | Pro | Trp |
| 1 | | | | 5 | | | | | 10 | |

<210> 23
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 <212> PRT
 <213> Artificial

<220>
 <223> Clone 2

<400> 23

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Tyr | Phe | Arg | His | Asn | Tyr | Asp | Pro | Trp |
| 1 | | | | 5 | | | | | 10 | |

<210> 24
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> Clone 3

<400> 24

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Tyr | Phe | Ser | His | Asn | Tyr | Asp | Pro | Trp |
| 1 | | | | 5 | | | | | 10 | |

<210> 25
 <211> 11

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<212> PRT
<213> Artificial

<220>
<223> Clone 4

<400> 25

Asp Thr Tyr Phe Gly His Arg Tyr Asp Pro Trp
1 5 10

<210> 26
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Clone 5

<400> 26

Asp Thr Tyr Phe Gly His Val Tyr Asp Pro Trp
1 5 10

<210> 27
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Clone 6

<400> 27

Asp Thr Tyr Phe Ala His Asn Tyr Asp Pro Trp
1 5 10

<210> 28
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Clone 7

<400> 28

Asp Thr Tyr Phe Gly His Leu Tyr Asp Pro Trp
1 5 10

<210> 29
<211> 11

SAP702PCT. ST25

<212> PRT
<213> Artificial

<220>
<223> Clone 8

<400> 29

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Tyr | Phe | Gly | His | Asp | Tyr | Asp | Pro | Trp |
| 1 | | | | 5 | | | | | 10 | |

<210> 30
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Clone 9

<400> 30

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Tyr | Phe | Tyr | His | Asn | Tyr | Asp | Pro | Trp |
| 1 | | | | 5 | | | | | 10 | |

<210> 31
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Clone 10

<400> 31

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Tyr | Phe | Gly | His | Trp | Tyr | Asp | Pro | Trp |
| 1 | | | | 5 | | | | | 10 | |